

AMENDED CLAIMS

received by the International Bureau on 01 August 2005 (01.08.05): original claims 1-39 have been replaced by amended claims 1-37 (5 pages).

+ STATEMENT**THE INVENTION CLAIMED IS:**

1. A connector for connecting a cable to a printed wiring board comprising:
a dielectric housing;
5 a conductive signal contact mounted on said housing and adapted for mating with a
signal conductor of the cable; and
a spring connector connected to said housing, a receptacle defined between said
spring connector and said housing, said spring connector having a deflectable arm for causing
said signal contact on said housing to electrically connect to a signal contact on the printed
10 wiring board when the printed wiring board is inserted into said receptacle.
2. A connector as defined in claim 1, wherein said spring connector is a separate
member from said housing, such that said spring connector can be engaged and disengaged
from said housing, said spring connector including a body and said deflectable arm is
15 provided in said body.
3. A connector as defined in claim 2, wherein said deflectable arm is curved in
an unflexed position.
- 20 4. A connector as defined in claim 2, further including a ground shield attached
to said housing, said spring connector including ground means for connecting said ground
shield to a ground contact on the printed wiring board.
5. A connector as defined in claim 4, wherein said ground means comprises a
25 conductive ground terminal provided in said body.
6. A connector as defined in claim 5, wherein a portion of said ground terminal is
capable of flexing relative to said body when the connection between said ground shield and
the ground terminal on the printed wiring board is made.
- 30 7. A connector as defined in claim 5, wherein said ground terminal is electrically
isolated from said signal terminal in said body.

8. A connector as defined in claim 1, further including a ground shield attached to said housing and said deflectable arm is formed as part of said ground shield.

5 9. A connector as defined in claim 8, wherein said deflectable arm has a dimple thereon for engagement with a ground terminal on the printed wiring board.

10 10. A connector as defined in claim 1, wherein said receptacle provided has openings on two sides thereof into which the printed wiring board can be inserted.

11. A connector as defined in claim 10, wherein said signal contact is mounted at approximate the centerpoint of the receptacle.

15 12. A connector as defined in claim 1, further including a ground shield attached to said housing.

13. A connector as defined in claim 12, wherein said signal contact is generally mounted at approximate the centerpoint of the receptacle.

20 14. A connector as defined in claim 13, further including ground contacts provided on said housing on opposite sides of said signal contact and means for connecting said ground contacts with said ground shield.

25 15. A connector as defined in claim 14, further including a conductive layer provided between the housing and said ground shield.

30 16. A connector as defined in claim 12, wherein said ground shield includes an opening through which the cable is inserted, said opening having a first section which is larger than the cable to allow the cable to be freely inserted therein and second section which is smaller than the cable into which the cable can be inserted, thereby causing a secure connection between a ground conductor of the cable and said ground shield.

17. A connector as defined in claim 16, further including a tapered section between said first and second sections of said opening.

5 18. A connector as defined in claim 12, wherein said ground shield includes a pair of wings capable of being attached to a guide rail in a device.

19. A connector as defined in claim 18, wherein said wings have convolutions thereon.

10 20. A connector as defined in claim 1, wherein said signal contact is generally T-shaped.

15 21. A connector as defined in claim 20, further including a ground shield attached to said housing and ground contacts provided on said housing on opposite sides of said T-shaped signal contact, said ground contacts being electrically connected to said ground shield.

22. A connector as defined in claim 1, wherein said housing includes a passageway therein into which at least a portion of the cable is inserted.

20 23. A connector as defined in claim 22, wherein said signal contact extends into said passageway.

24. A connector as defined in claim 22, wherein said passageway includes a plurality of ribs therein for gripping the cable.

25 25. A connector as defined in claim 22, further including a ground shield attached to said housing.

30 26. A connector as defined in claim 25, wherein a portion of said passageway has a conductive material therein, said conductive material being electrically connected to said ground shield.

27. A connector as defined in claim 25, wherein a portion of said passageway has a conductive material therein, and a portion of said housing has a conductive material thereon, said conductive material in said passageway being electrically connected to said conductive material on said housing, and said conductive material on said housing being electrically connected to said ground shield.

28. A connector as defined in claim 22, wherein said housing is formed by first and second bodies which are joined together.

29. A connector as defined in claim 28, further including a ground shield which joins said first and second bodies together.

30. A connector as defined in claim 29, wherein said ground shield includes a pair of arms for joining said first and second bodies together.

31. A connector as defined in claim 29, wherein said ground shield includes a pair of wings capable of being attached to a guide rail in a device, said wings including convolutions thereon.

32. A connector as defined in claim 1, further including at least one protrusion formed of a dielectric material on the housing proximate to the signal contact.

33. A connector as defined in claim 1, further including a ground shield; said dielectric housing being connected to said ground shield; and a pair of ground contacts mounted symmetrically on the housing and electrically connected to the ground shield.

34. A connector as defined in claim 33, further including a plurality of plated through apertures provided through the housing for providing the electrical connection from the ground contacts to the ground shield.

35. A connector as defined in claim 33, wherein the signal contact is generally centrally located on the housing.

36. A connector as defined in claim 1, wherein said deflectable arm biases the printed wiring board against said signal contact mounted on said housing.

5 37. A connector as defined in claim 36, further including a ground shield, said dielectric housing being connected to said ground shield, and a pair of ground contacts mounted symmetrically on the housing and electrically connected to the ground shield; and wherein when said deflectable arm biases the printed wiring board, a ground contact on the printed wiring board is engaged against one of said ground contacts mounted on said housing.

Remarks to the Written Opinion of the International Searching Authority**International Application Number: PCT/US2005/002809**

This statement is in response to the Search Report mailed 01 June 2005. United States Patent No. 5,437,562 to Michael was cited as an "X" reference against independent claim 1. United States Application Publication No. 2002/177332 to Hubbard was cited as "X" reference against independent claim 37. Independent claim 37 has been canceled.

The remaining independent claim 1 has been amended to specify "a spring connector connected to said housing, a receptacle defined between said spring connector and said housing, said spring connector having a deflectable arm for causing said signal contact on said housing to electrically connect to a signal contact on the printed wiring board when the printed wiring board is inserted into said receptacle." Michael clearly does not disclose or suggest such limitations. The formed end 124 of the signal contact 104 of Michael does not deflect. As shown in FIG. 12, the formed end 124 is seated against the housing 70. The elements specified by the Examiner do not meet the limitations of claim 1 as amended. Therefore, Applicant respectfully submits that the amended claims are novel in view of the cited reference. Favorable action is requested.